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Editorial.—IN THE TORREY BULLETIN for June the editors continue their valuable list of the state and local floras of the United States. This is the third paper and is devoted to the south-eastern states, embracing Virginia, West Virginia, North Carolina, South Carolina, Georgia and Florida. Georgia seems to have been most poorly provided for, but a single local list having been made in the whole state.

PROF. A. B. SEYMOUR, in the last GAZETTE, was made responsible for a rather meaningless note. His note upon "Early Fungi" bore the date of March 5 in the manuscript, but no date appeared in print, thus making it lose all its force. We would suggest that our readers date the note referred to, that it may not be lost sight of.

MR. CHAS. E. SMITH, of Philadelphia, writes reporting a new station for *Corema Conradii*. He says: "I learned that *Corema Conradii* grew on Shawangunk Mountain, Ulster Co., N. Y., and as the plant has disappeared from two of the four localities formerly known (New Jersey and Long Island) I went there and got it. In the struggle for existence it appears to be getting the worst of it, and is dying out. On the second of May I found it in full bloom.

THE INDEX to the genus *Carex* omits *C. Porteri*, Olney, found by Prof. Porter in Maine; *C. glaucoidea*, Tuck., found in New Jersey; and gives "*C. Fraseriana*, Sims, no synonym." Gray writes it *C. Fraseriana*, Sims; Chapman *C. Fraseri*, Sims; Boott in his *Carices* writes *C. Fraseri*, Andrews, syn. *C. Fraseriana*, Sims, and adds a note giving names and dates of publication to justify the name *Fraseri* and Andrews as the authority. For these corrections we are indebted to Mr. Chas. E. Smith.

MR. JOSEPH JACKSON, JR., of Millbury, Mass., is contributing to the *Worcester Daily Spy* some very interesting notes on the flora of that neighborhood. The subject is treated in a popular way which makes it interesting to the unscientific reader. The articles really furnish lists of the first appearance of the plants of that region, accompanied by appropriate remarks. As soon as 50 species have been enumerated they are published, thus making at the close of the season quite a complete catalogue.

PROF. V. CESATI, Director of the Botanic Garden at Naples, has offered for sale his large collection of plants. It consists of about 49,000 species, 32,000 being phanerogams, the whole containing over 350,000 specimens. The phanerogams are classified

according to DeCandolle's system, and are represented in many instances by original specimens. The collection is mounted on white paper and arranged in volumes. Prof. Cesati also offers for sale the autographs of 2,500 botanists. Persons desiring to obtain these collections, which contain plants from all over the world, should address Prof. Cesati before the end of August.

H. BAILLON has just published in Paris his *Monographie des Composees*. In Bentham and Hooker's *Genera Plantarum* this great order contains 780 genera, although the work of reduction was so rigidly performed that some genera were afterwards reinstated. Baillon has reduced the number of genera to 403, and in the sense that generic consolidation is a better fault than the opposite extreme this is commendable. Dr. Gray, for whose opinion in such matters we always look, says that even yet Baillon "keeps up several genera which we find it impossible to maintain; and there are others which should have been suppressed upon his principles, though not upon ours."

HUGO DeVRIES claims to have found the function of resinous matters in plants. That they were excrementitious has long since been given up, for their withdrawal from the plant proves to be an injury rather than a benefit. Hence they must be of some use to the plant, for in these days we do not believe so much that things were made for us as that we find in them and use what was made for themselves. DeVries thinks that in resin-producing plants the resinous juice is stored in the tree as a balm for wounds. Being stored up under tension it is immediately poured out over a wounded surface. No better dressing could be found than this rapidly oxidizing liquid, which excludes air and moisture and germs which induce decay.

THE UNIVERSITY OF MINNESOTA will open a summer school during the coming season, beginning July 5th, to continue four weeks. The course in Botany will be conducted by Prof. J. C. Arthur, whose name and reputation are well known to readers of the GAZETTE. Laboratory work will be a prominent feature, and the subjects presented will be Morphology of the Vegetable Cell; Special Structure of Plants, considered by Classes; Vegetable Histology and Physiology; Bibliography and History of Botany. A personal acquaintance with Mr. Arthur in the laboratory gives the writer an opportunity to heartily recommend his work and methods to those desiring such instruction. He can be addressed at Charles City, Iowa, until July; after that at Minneapolis.

THE GARDENERS' MONTHLY for June is an unusually interesting number. Mr. Meehan is called upon to puncture a good deal of nonsense, and usually does so in a very sprightly way. In the number referred to, among other things, he noticed a curious paper read at the recent Forestry Convention held in Cincinnati, in which the writer suggested that the examination of cross-sections in a tree would show when the seasons in the past were dry seasons, and when wet ones—thin layers indicating the dry and broad ones the

wet. Mr. Meehan suggests that by taking sections at different places in the same log we would find the same layer bearing all kinds of testimony. The writer has heard classes gravely informed that the above was the fact, and also that the rings of growth found in fossil trees necessarily indicated seasons of cold and warmth. In the last instance a bright boy rather nonplussed the teacher by asking if there were no exogenous trees in the tropics.

PROF. F. C. PHILLIPS, of Western University, Penn., has been experimenting upon the effects produced upon plants by being grown in soil impregnated with certain metallic oxides. His conclusions are as follows:

1. That healthy plants, grown under favorable conditions, may absorb through their roots small quantities of lead, zinc, copper and arsenic.

2. That lead and zinc may enter the tissues in this way without causing any disturbance in the growth, nutrition and functions of the plant.

3. That the compounds of copper and arsenic exert a distinctly poisonous influence, tending, when present in larger quantity, to check the formation of roots, and either killing the plant or so far reducing its vitality as to interfere with nutrition and growth.

New Stations for Rare Plants.—1. *Botrychium matricariaefolium*, Al. Br. About June 10 of last summer, in company with Prof. Joseph Milliken of Columbus, O., I made an excursion for plants in the vicinity of this city. In a thicket on a northern slope, we found a specimen of this little fern. Going down on our hands and knees and making a thorough search, we finally counted *eighty-four* (84) specimens growing on an area of three or four square rods. This plant grows quite abundantly in eastern New York and in New England. But I have never before known it to be found west of the Alleghanies and south of Lake Superior. I have no doubt, though, that it grows on many a damp shady hillside with a northern exposure, in the states of Indiana, Kentucky and Ohio. It should be looked for during the month of June.

2. *Veratrum Woodii*, Robbins. This plant grows in the woods about Dayton, O. My attention was first called to it by finding it transplanted from the woods to a neighbor's door-yard. The plants were very few and far between, however, till I found quite a patch of it near Ludlow Falls, 17 miles above Dayton, on the banks of the Stillwater river. In one spot I counted fifteen (15) plants; the trouble was however that only four or five of them threw up flower stalks, so that I did not get many specimens.—A. P. MORGAN, Cincinnati.

The Exogenous Flora of Lincoln Co., Miss., From October to May. II.—In the brilliant procession of spring flowers come a few Asters and Golden Rods, heralds of the midsummer phalanx. Even the curious *Aster adnatus* is already in bud. Two things impress me as distinctive of the scenery and of the woodlands here.